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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/928,929

08/13/2001

Terho Kaikuranta

944-003.101

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05/20/2004

WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

NGUYEN, CHANH DUY

ART UNIT

PAPER NUMBER

2675

12

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/928,929

Applicant(s)

KAIKURANTA, TERHO

Examiner

Chanh Nguyen

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on April 29, 2004 has been entered and considered by examiner.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton (US 2002/0075243 A1) in view of Hasegawa et al (U.S. Patent No. 6,208,330) and further in view of Jambhekar et al (U.S. Patent No. 5,715,524).

As to claim 1, Newton discloses a touch pad device (100) including a touch pad area(102) having a first side (e.g. left side) and an opposing second side (right side) (Figure 3), a first set of optical sensor components (106, 109) disposed along the first side (left side) of the touch pad area, a second set of optical sensor components(106, 109) disposed along the second side (right side) of the touch pad area. Newton teaches each of the first and second set of optical sensors including at least two light emitter (106) and one light receiver (109) disposed substantially between the two light emitters (106) to detect the presence of the object at the touch pad device (14) (see Figure 3) such that the light receiver (109) capable of receiving light emitted from the

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light emitter for providing an output signal and the output signal caused to changed when the object (finger or stylus) is present (see page 4, paragraphs 0030-0031).

Newton teaches the step of detecting the change in the output signal for providing the touch signal when the object is present (see page 4, paragraphs 0037).

Newton does not mention the objected being "reflected". Hasegawa teaches that the optical scanning/detection unit 10A detects reflections light from the object...preciseness of discrimination of a finger or a fist is enhanced by considering a distance between the optical scanning/detecting unit 10a and the object" (see column 5, lines 40-49". This reads on the claimed "reflected objected" recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used reflecting light detection circuit to the detection circuit of Newton so as to provide the preciseness of pen input operation (se column 1, lines 59-63 of Hasegawa).

Both Newton and Hasegawa and do not mention the steps of preventing unintended touch pad input resulting form accidental touching of a touch pad device in an electronic device. In the same field of endeavor (cellular phone with touch pad), Jambhekar teaches an electronic device (103) a key lock function (i.e. a switch 127) settable in a first state allowing a user to input into the electronic device one of a plurality of input functions (e.g., touch pad function ) and settable in a second state allowing the user to input into the electronic device (103) one of a number of selected one of a the plurality of input functions (e.g., key function) (see column 3,line 66 through column 4, line 11). Jambhekar teaches all the steps of determining whether the

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key lock function (switch 127) is in the first state or in the second state in response to the touch signal, if the key lock function is the first state, if the key lock function is in the second state and the touch pad is one of the selected input functions, providing the touch pad input indicative of the touch pad function (see column 2, lines 51-55 and column 4, lines 1-11). It is clear that the Jambhekar clearly teaches a method of preventing unintended touch pad input resulting from accidental touch of a touch pad device in an electronic device because the switch (127) determines activating only one of the user functions at time (i.e. either activate key pad user function or touch pad user function). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the key lock function of Jambhekar to the electronic device of Newton as modified by Hasegawa so that a user could easily identify the user interface of a first data service from a user interface of a second data service (see column 1, lines 43-46 of Jambhekar).

As to claim 6, this claim differs from claim 1 only in that the limitation of a first state functions defined in the claim 6 whereas claim 1 defines the function of second state. Jambhekar clearly teaches the step of providing the touch pad input indicative of the touch pad function only if the key lock function is the first state (see column 4, lines 1-11).

As to claim 10, this claim differs from claims 1 and 6 only in that claims 1 and 6 are method whereas claim 10 is apparatus. Thus, apparatus claim 10 is analyzed as previously discussed with respect to claims 1 and 6 above.

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As to claims 2-3, 8 and 11-12, since the switch (127) of Jambekar connected to a microprocessor (115) for performing function change between touch pad and key pad. The processor (133) is clearly carryout by a software. The processor (113) is just a piece of silicon or semiconductor if it does not have software programming on it.

As to claim 4, Newton clearly teaches the touch pad device allowing the user to choose one of a plurality of touch pad function based on the location of the object present at the touch pad device including the step of determining the chosen touch pad function based on the change in the output signal (see page 1, paragraph 0004). That is the electronic device of Newton includes one of the devices such as mobile telephone, PDA, book reader. These device have a plurality of functions displayed on the screen so that a user can select one of the functions to provide the information for a user needed.

As to claim 5, since both device of Newton and Jambekar are mobile telephone. It is clear that the selected functions including zero (i.e. number zero located on the key pad of the telephone).

As to claims 7, 9, combining Newton and Jambekar would arrive the step of powering off the optical sensor components when the key lock function is in the second state. Moreover, it is well-known to turn off the touch pad for conserving power, even acknowledged by applicant on page 2, lines 8-29 of the specification.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the reference of Newton has been added for new ground of rejection.

### **Inquiries**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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*cm*  
C. Nguyen  
May 15, 2004

*Chanh Nguyen*  
CHANH NGUYEN  
PRIMARY EXAMINER